



PATENT
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Toshimichi Kishimoto et al.

Application No.: 10/635,739

Filed: August 5, 2003

For: STORAGE DEVICE AND
METHOD OF SETTING
CONFIGURATION
INFORMATION OF SAME

Customer No.: 20350

Examiner: Jeffrey A. Gaffin

Technology Center/Art Unit: 2182

Confirmation No.: 8839

PETITION TO MAKE SPECIAL FOR
NEW APPLICATION UNDER M.P.E.P.
§ 708.02, VIII & 37 C.F.R. § 1.102(d)

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This is a petition to make special the above-identified application under MPEP § 708.02, VIII & 37 C.F.R. § 1.102(d). The application has not received any examination by an Examiner.

(a) The Commissioner is authorized to charge the petition fee of \$130 under 37 C.F.R. § 1.17(i) and any other fees associated with this paper to Deposit Account 20-1430.

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(b) All the claims are believed to be directed to a single invention. If the Office determines that all the claims presented are not obviously directed to a single invention, then Applicants will make an election without traverse as a prerequisite to the grant of special status.

(c) Pre-examination searches were made of U.S. issued patents, including a classification search and a computer database search. The searches were performed on or around July 12, 2004, and were conducted by a professional search firm, Kramer & Amado, P.C. The classification search covered Class 707 (subclasses 3 and 203), Class 709 (subclasses 221, 222, and 224), and Class 713 (subclasses 189, 200, 201, and 202) for the U.S. and foreign subclasses identified above. The computer database search was conducted on the USPTO systems EAST and WEST. The inventors further provided four references considered most closely related to the subject matter of the present application (see references #5-8 below), which were cited in the Information Disclosure Statements filed on August 5, 2003.

(d) The following references, copies of which are attached herewith, are deemed most closely related to the subject matter encompassed by the claims:

- (1) U.S. Patent No. 4,807,186;
- (2) U.S. Patent No. 6,334,075 B1;
- (3) U.S. Patent Publication No. 2003/0233355 A1;
- (4) U.S. Patent Publication No. 2003/0220991 A1;
- (5) Japanese Patent Publication No. 05-128032;
- (6) Japanese Patent Publication No. 06-175827;
- (7) Japanese Patent Publication No. 11-161604; and
- (8) Japanese Patent Publication No. 2000-181687.

(e) Set forth below is a detailed discussion of references which points out with particularity how the claimed subject matter is distinguishable over the references.

A. Claimed Embodiments of the Present Invention

The claimed embodiments relate to setting and modifying storage configuration information of an information processing apparatus. According to embodiments of the invention, when a command group with which configuration information is modified and the parameters required to execute the commands by the service processor are received from an outside source, the service processor can check the validity of the commands to determine whether to execute them. See page 11, paragraph [0056].

Independent claim 1 recites a storage device to receive demands for writing and reading data from host devices to control writing and reading of data from storage media. The storage device comprises a service processor configured to set configuration information of the storage device, and a terminal device connected to the service processor via a private line to send a command group, which is received from an operator and related to the configuration information of the storage device, to the service processor. The service processor determines approval or denial of execution of the command group prior to execution of the command group received from the terminal device.

Independent claim 4 recites a method of setting a configuration information of a storage device to receive demands for writing and reading of data from host devices to control writing and reading of data from storage media, the storage device including a service processor for setting of configuration information of the storage device, and a terminal device connected to the service processor to send a command group received from an operator and related to the configuration information. The method comprises sending the command group via the terminal device, receiving the command group at the service processor and determining approval or denial of execution of the command group, and executing the command group to set a structure of the storage device in the case where approval of execution is determined.

Independent claim 6 recites a method of setting configuration information of a storage device comprising a service processor for setting of configuration information of the storage device, and a terminal device connected to the service processor to give and take information from the service processor, the method comprises determining by a storage management terminal validity of a command group described on a script sheet, creating a digest of the command group when the command group is determined to be valid, using a

secret key to encrypt the digest created, sending by the terminal device to the service processor a digest data of the digest encrypted using the secret key and the command group described on the script sheet, creating a digest from the command group received by the service processor, decrypting the encrypted digest data received by the service processor to compare the decrypted digest data with a digest data of the digest created from the command group received by the service processor, and executing the command group described on the received script sheet to set a structure of the storage device in the case where results of comparison between the decrypted digest data and the digest data of the digest created from the command group indicates correspondency.

One of the benefits that may be derived is that it provides a highly reliable storage control device in which the approval or denial of the execution of commands is determined when a command group relating to configuration information of a storage is received. Present application at page 2, paragraph [0009].

B. Discussion of the References

1. U.S. Patent No. 4,807,186

This reference relates to a data terminal with the capability of checking memory storage capacity as well as program execution parameters. According to the reference, prior to the start of the execution of a program, the amount of memory area available for processing new data or for loading application programs is automatically displayed. See column 1, lines 29-60. The reference further discloses that the operator enters conditions for the execution of the program. After the execution conditions for the program are set, the process is advanced to step n22 and the check sum codes representing the contents of the execution conditions for the program are set and stored. See column 4, lines 3-34.

This reference does not disclose that a terminal device sends a command group, which is related to the configuration information of the storage device, to the service processor, and that the service processor determines approval or denial of execution of a command group, as recited in independent claims 1, 4, and 6.

2. U.S. Patent No. 6,334,075 B1

This reference discloses a data processor providing interactive user configuration of data acquisition device storage format. It further shows a data processing apparatus that includes a storage format setting unit for setting a storage format in an interactive manner in order to store acquisition data, acquired from a control appliance connected thereto, having a storage file forming unit for forming a storage file used to store the acquisition data based upon the storage format set by the storage format setting unit; and a storage unit for storing the acquisition data acquired from the control appliance in the storage file formed by the storage file forming unit. That is, it shows a diagram for indicating acquiring data, which has been set in an interactive manner, based upon the storage format setting program and stored in a setting data file. See column 23, line 63 to column 24, line 37.

The setting data file in the reference (col. 24, lines 33-37) is different from the command group of the present application, which is related to the configuration information of the storage device. In the present application, a script sheet referred to here means a command group, with which a service processor sets a structure of a storage device, and may contain variables required for execution of commands. Such a command group is also called a script definition file, and a processor sequentially reads commands defined in a script to interpret and execute the same. See present application at page 5, paragraph [0028].

Therefore, this reference does not teach a service processor that determines approval or denial of execution of a command group prior to execution of the command group, as recited in independent claims 1, 4, and 6.

3. U.S. Patent Publication No. 2003/0233355 A1

This reference discloses a control device capable of data communication and transmission system provided therewith. It further shows a control device comprising a data storage section which stores data, a setting data storage section which stores setting data for determining whether or not to approve a transmission and/or reception for every data stored in the data storage section, and a data transmission/reception section which is configured so that a transmission and/or reception process may be performed only on data which has been approved for transmission and/or reception by referring to the setting data stored in the setting data storage section.

When data is transmitted from the data transmission/reception section of the data management device 10 to the data transmission/reception section 42 of the communication control section 40 via the network 2, the data transmission/reception section 42 refers to the setting data stored in the second setting data storage section 41 in receiving this, and judges whether the reception (update) is an approved data or not. If it is the approved data, the data transmission/reception section 42 receives and transmits it to the data input/output section 23. If it is not the approved data, the data transmission/reception section 42 returns a message, to that effect, to the data management device 10. See column 3, paragraph [0043].

The data which the data transmission/reception section 12 judges is different from the command group as disclosed and claimed in the present application, which is related to the configuration information of the storage device. See page 5, paragraph [0028].

Therefore, this reference does not teach a service processor that determines approval or denial of execution of a command group prior to execution of the command group, as recited in independent claims 1, 4, and 6.

4. U.S. Patent Publication No. 2003/0220991 A1

This reference relates to a storage configuration changing apparatus where a storage configuration is automatically changed depending on a storage configuration change schedule which is defined previously by an administrator. It is verified whether a storage configuration can be formed or not at the time designated when the schedule is changed.

The reference merely discloses changing the storage device configuration information and, particularly changing the storage configuration under the environment that the job profile changes with the passage of time. It fails to teach a service processor that determines approval or denial of execution of a command group prior to execution of the command group, as recited in independent claims 1, 4, and 6.

5. Japanese Patent Publication No. 05-128032

This reference relates to a method for automatically setting up network environment in an information processing system. The information processing system includes an information processor 1 provided with a network environment setting means 4

having an information processor identification (ID) information collecting means 7 and a network environment setting information transmitting means 10; and plural information processors provided with network environment setting means 5 having information processor ID information transmitting means 8 and network environment setting information inputting means 11.

The reference merely discloses a technique for settings in a network environment, which can be set by end users of average skill. Present specification at page 1, paragraph [0004]. It does not teach a service processor that determines approval or denial of execution of a command group prior to execution of the command group, as recited in independent claims 1, 4, and 6.

6. Japanese Patent Publication No. 06-175827

This reference relates to an information processor that can automatically prepare environments for program execution suitable for programs for each program to be executed. A personal computer includes a keyboard 4, collator 7, managing information storage device 8, and process environment setting part 18. When a user inputs an application name to be executed through the keyboard 4, the setting part 18 retrieves the storage device 8 based on the application name and reads correspondent environmental information. The setting part 18 collates the read environmental information with set environmental information composed of mode information 111, 151, 161, and 171 set on the computer by using the collator 7. When the information is coincident as a result of collation, the application is executed as it is; but when the information is not coincident, the application is executed after the setting of mode information on the computer is changed by the setting part 18 while using the read mode information.

The reference merely discloses a technique of automatically creating settings of a network environment in which a program is implemented on a computer, to eliminate the need for end users to make the difficult settings for an environment. Present application at page 1, paragraph [0004]. It fails to teach a service processor that determines approval or denial of execution of a command group prior to execution of the command group, as recited in independent claims 1, 4, and 6.

7. Japanese Patent Publication No. 11-161604

This reference discloses a method to allow anybody to simply register environmental information in a client machine by uniform contents and with accuracy, by providing a registering means or the like registering environmental information designated by a script for setting environmental information described within a script definition file in a disk. A job execution client downloads a script definition file describing the script for setting environmental information registered in a server and executes the script to update environmental information. In addition, the job execution client obtains information on job processing object from a server machine, processes this information and transmits a processing result to the server machine at need. A server for registering environmental information server receives a script definition file describing the script for setting environmental information inputted from a manager or the like, and transmits the received script definition file to the server machine, which registers the received script definition file.

The reference merely relates to a technique in which the settings for a network environment with connected clients are preserved as a script file in a server connected to the network and automatically downloaded for setting the environment. Present application at page 1, paragraph [0004]. It does not teach a service processor that determines approval or denial of execution of a command group prior to execution of the command group, as recited in independent claims 1, 4, and 6.

8. Japanese Patent Publication No. 2000-181687

This reference discloses a technique to save labor required to set the system environment by controlling the environment of the electronic equipment according to the setting information stored in a first storage part and storing the setting information, which is stored in the first storage part, in a second storage part. A control part 1 controls the environment of the electronic equipment according to the setting information stored in the first storage part 2 stored with the setting information of the electronic equipment. A storage control part 4 stores the setting information, which is stored in the first storage part 2, in the second storage part 3. A CPU executes a basic input/output system (BIOS) to function as a control part for controlling the system environment of a computer system according to the setting information stored in a CMOSRAM and also function as a storage control part for storing the setting information, stored in the CMOSRAM, in a flash memory. Further it also

functions as the second control part for selecting one of two or more pieces of setting information stored in the flash memory and storing it in the CMOSRAM.

The reference merely discloses a method in which system management information is preserved in two memories and errors are avoided by referring to one of the memories when an error occur after system management information in the other memory is edited. A password may be required when setting information is edited. Present application at pages 1-2, paragraph [0005]. However, it does not teach a service processor that determines approval or denial of execution of a command group prior to execution of the command group, as recited in independent claims 1, 4, and 6.

(f) In view of this petition, the Examiner is respectfully requested to issue a first Office Action at an early date.

Respectfully submitted,



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